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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,348	09/29/2000	Steven M. Bennett	42390P9238	2192

7590 04/11/2006

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EXAMINER	
LERNER, MARTIN	

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/676,348	BENNETT, STEVEN M.	
	Examiner	Art Unit	
	Martin Lerner	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6,7,9,15,16,18 and 26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *26* is/are allowed.

6)☒ Claim(s) *6,7,15 and 16* is/are rejected.

7)☒ Claim(s) *9 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 6, 7, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kuhn et al.* in view of *Kanevsky et al.*

Concerning independent claims 6 and 15, *Kuhn et al.* discloses a method, system, and computer program, comprising:

"receiving digitized voice data from a user" – speech input supplied through microphone 26 is first digitized (column 3, lines 66 to 67: Figure 2);

"processing the voice data to determine one or more phrases recognized as the digitized voice data provided by the user based on a currently active recognition grammar" – the output of speech recognizer module 40 is supplied to the natural language parser 42 working in conjunction with a set of goal oriented grammars 44 (column 3, line 66 to column 4, line 10: Figure 2); in some instances, the natural language parser will immediately identify a program the user is interested in watching, but in other instances, there may be multiple choices or possibilities (column 4, lines 38 to 54: Figure 2); the set of grammars have context-sensitive grammar rules for each

topic, e.g. grammar A 240 and grammar B 242 ("a currently active recognition grammar") (column 6, lines 50 to 65: Figure 4);

"when one or more phrase is recognized as the digitized voice data provided by the user as a result of voice-recognition uncertainty, using user-specific context information to choose a recognized phrase from the one or more phrases recognized as the digitized voice data" – automatic speech recognition process block 217 generates word confidence vector 268 which indicates how well words in input sentence 218 were recognized ("voice-recognition uncertainty"); dialog manager 130 generates dialogue context weights 269 by determining the state of the dialog by asking the user about a particular topic; due to this request, dialog manager 130 determines what the user said (column 7, lines 18 to 29: Figure 4); the dialog manager has a user profile data store 56 ("user-specific context information"), which stores information about the user's previous information selections; thus, this data store helps the dialog manager tune its prompts to best suit the user's expectations (column 4, lines 48 to 54: Figure 2); N-best processor 270 selects the highest-scoring candidate as what the user intended (column 7, lines 59 to 64: Figure 4).

Concerning independent claims 6 and 15, *Kuhn et al.* omits an elimination procedure to select a final phrase, but *Kanevsky et al.* discloses a method, system, and computer program, wherein:

"using the user-specific context information comprises: selecting elements of uncertainty within the one or more recognized phrases" – as each ambiguity is encountered, recognition is suspended to allow presenting questions to the user to

discriminate between potential selection classes; an intermediate question is posed to discriminate between "meet at heaven" and "meet at seven" (column 3, lines 27 to 39);

"selecting the user-specific context information from a database, the selection of the user specific context information based on the elements of uncertainty previously selected within the one or more recognized phrases" – classification questions are posed based upon classification questions concerning space or time relationships, whether the phrase describes a noun, verb, or adjective, etc. (column 3, lines 40 to 63); potential final alternative classes may be selected to include a personal characteristics class profile ("user-specific context information") (column 4, lines 37 to 45);

"eliminating phrases within the one or more recognized phrases based on the user-specific context information regarding the elements of uncertainty" – based on the user's response, intermediate decoding alternatives are narrowed, eliminating choices that are incongruous with the user's response (column 5, lines 4 to 9: Figure 2: Step 132);

"selecting a final phrase as the recognized phrase once all other phrases within the one or more recognized phrases are eliminated" – if all ambiguities have been resolved, then a final decoding output is produced using the narrowed set of intermediate decoding alternatives; otherwise, the procedure iterates (column 5, lines 8 to 13: Figure 2: Step 134).

Concerning independent claims 6 and 15, *Kanevsky et al.* teaches a system and method for resolving decoding ambiguity via dialog has the advantage of improving language decoding performance and accuracy. (Column 1, Lines 50 to 53) It would

have been obvious to one having ordinary skill in the art to utilize the system and method for resolving decoding ambiguity to iteratively eliminate phrases until a final phrase is obtained as taught by *Kanevsky et al.* in the multi-modal dialog unit of *Kuhn et al.* for the purpose of improving language decoding performance and accuracy.

Concerning claims 7 and 16, *Kanevsky et al.* teaches selection classes may include classification questions about space relationships (column 3, lines 40 to 63), corresponding to "location information", which is one of the enumerated alternatives.

Allowable Subject Matter

3. Claim 26 is allowed.

4. Claims 9 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Claims 9, 18, and 26 present allowable subject matter because the prior art of record does not disclose or reasonably suggest selecting a phrase with a lowest confidence value and eliminating the phrase when user context information regarding conflicting elements validates the lowest confidence value in combination with an N-best speech recognition engine having a currently active recognition grammar. Although an N-best speech recognition engine tends to eliminate phrases having low confidence

values, a lowest confidence value is not selected, *per se*, but instead, a top N candidates are validated.

Response to Arguments

6. Applicant's arguments filed 19 January 2006 have been fully considered but they are not persuasive.

Firstly, Applicant repeats arguments that a combination of *Kuhn et al.* in view of *Kanevsky et al.* is improper. However, Applicant's arguments were reviewed, but it is maintained that *Kanevsky et al.* provides an express motivation for combination, a *prima facie* case of obviousness is presented, the references are from the same field of endeavor and/or analogous art, and directed to solving the same problem. See MPEP 2143 and 2144. Applicant has not presented any secondary evidence so as to overcome the rejection based upon obviousness, and the arguments presented are conclusory in nature.

Secondly, Applicant contends that *Kuhn et al.* and *Kanevsky et al.* fail to teach or suggest elements of independent claims 6 and 15 insofar as both are concerned with a dialog having a series of questions, and fine tuning prompts provided to the user so as to narrow down a selection for the user, but that the claimed invention does not utilize user context information to tune its prompts. However, even assuming *arguendo* that Applicant's invention does not tune prompts, the presence of additional elements from the references does not render the rejection improper. *Kuhn et al.* and *Kanevsky et al.* provide a combination that sets forth all the elements of the claims. The absence of a

feature, even supposing it is positively set forth by Applicant's Specification, does not render a claim patentable unless the absence is positively set forth by the claims. Although the claims are interpreted in light of the Specification, limitations from the Specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Thirdly, independent claim 26, and dependent claims 9 and 18, were reconsidered. These claims are now indicated as presenting allowable subject matter. The prior art of record does not disclose or reasonably suggest selecting a phrase with a lowest confidence value and eliminating the phrase when user context information regarding conflicting elements validates the lowest confidence value in combination with an N-best speech recognition engine having a currently active recognition grammar. Although an N-best speech recognition engine tends to eliminate phrases having low confidence values, a lowest confidence value is not selected, *per se*, but instead, a top N candidates are validated.

Therefore, the rejection of claims 6, 7, 15, and 16 under 35 U.S.C. 103(a) as being unpatentable over *Kuhn et al.* in view of *Kanevsky et al.* is proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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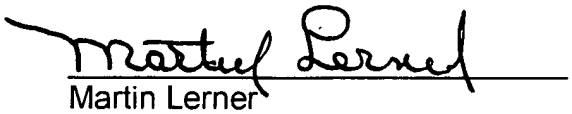

Martin Lerner
Examiner
Group Art Unit 2626